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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/709,811 | 05/28/2004 | John S. Austin | BUR920040136US1 | 3810 |
| 30449 | 7590 08/23/2005 | | EXAM | INER |
| | R, OLSEN + WATTS | | CHANG, | JOSEPH |
| 3 LEAR JET 1 | LANE | | | ! |
| SUITE 201 | | | ART UNIT | PAPER NUMBER |
| LATHAM, N | Y 12110 | | 2817 | |
| | | | DATE MAILED: 08/23/2004 | ς |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | |
|--|---|--|----------------------|
| | 10/709,811 | AUSTIN ET AL. | ₩ |
| Office Action Summary | Examiner | Art Unit | |
| | Joseph Chang | 2817 | |
| The MAILING DATE of this communication appearing for Reply | pears on the cover st | neet with the correspondence ad | idress |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, oly within the statutory minimu will apply and will expire SIX e, cause the application to be | may a reply be timely filed m of thirty (30) days will be considered timel (6) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133). | ly. ommunication. |
| Status | | | |
| 1) Responsive to communication(s) filed on 28 h | May 2004. | | |
| | s action is non-final. | | |
| 3) Since this application is in condition for allowa | ance except for forma | al matters, prosecution as to the | e merits is |
| closed in accordance with the practice under | | | |
| Disposition of Claims | | | |
| 4)⊠ Claim(s) <u>1-20</u> is/are pending in the application | 1. | | |
| 4a) Of the above claim(s) is/are withdra | | on. | |
| 5) Claim(s) is/are allowed. | | | |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected. | | | |
| 7) Claim(s) is/are objected to. | | | |
| 8) Claim(s) are subject to restriction and/o | or election requireme | nt. | |
| Application Papers | · | | |
| 9) The specification is objected to by the Examine | or. | | |
| | | shipsted to by the Everiner | |
| 10) The drawing(s) filed on 28 May 2004 is/are: a) | • | | |
| Applicant may not request that any objection to the | | | FD 4 404(4) |
| Replacement drawing sheet(s) including the correct | • | • • • | ` ' |
| 11) The oath or declaration is objected to by the Ex | xaminer. Note the at | ached Office Action of form Pi | 10-152. |
| Priority under 35 U.S.C. § 119 | | | |
| 12)☐ Acknowledgment is made of a claim for foreigr | n priority under 35 U. | S.C. § 119(a)-(d) or (f). | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | |
| Certified copies of the priority document | ts have been receive | d. | |
| Certified copies of the priority document | ts have been receive | d in Application No | |
| Copies of the certified copies of the prior | ority documents have | been received in this National | Stage |
| application from the International Burea | u (PCT Rule 17.2(a)) |). | |
| * See the attached detailed Office action for a list | of the certified copie | s not received. | |
| | | | |
| Attachment(s) | ∆ □ | andow Purpose (DTO 440) | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | | erview Summary (PTO-413) per No(s)/Mail Date | |
| Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | | ice of Informal Patent Application (PTC | D-152) |
| Patent and Trademark Office | · , · · · | | |

Application/Control Number: 10/709,811

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DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-14 and 16-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schorn US Patent No. 6,278,334.

Schorn discloses in Figures 1-4 an oscillator (Fig. 1) and a method comprising: first (Vdd) and second (Ground) operating voltages, delay stages (4, 6, 8, 10, 12), an inverting circuit (44, see Fig. 4), input node (IN), output node (OUT), a control circuit (46, 48, 50, 52), a first switch circuit (upper transistor of 46 and lower transistor of 48), (a first resistance adjusting circuit (lower transistor of 46 and upper transistor of 48), external control signal (Vctrl). It is noted that every elements and connection are the same as the one in this application and therefore any functional limitations recited in the claims are inherently present.

Regarding claim 6, 14, and 20, inverter 44 is inherently a CMOS inverter because of the type of transistors and its layout shown in the figure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schorn in view of Abe et al.

As discussed above, Schorn discloses an oscillator as recited in the claims except an extrinsic capacitor coupled between the output node and ground. As would have been well known in the art, capacitors or capacitive elements between the output node and ground are present whether intrinsically or extrinsically because the capacitance is a determination factor for the delay, for example, Abe et al. shows capacitor CL in Figure 5. Further, extrinsic capacitors are beneficial to an adjustment of amount of delays. Therefore, it would have been obvious to one of ordinary skill in the

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art to place an extrinsic capacitor between the output node and ground because such a modification would have been beneficial to an adjustment of amount of delays.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishikido discloses a ring oscillator having current control unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Chang whose telephone number is 571 272-1759. The examiner can normally be reached on Mon-Fri 0700-1730.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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